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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/862,826	05/22/2001	Isao Takeuchi	7217/64564	8870
530 7590 09/25/2007 LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK 600 SOUTH AVENUE WEST WESTFIELD, NJ 07090			EXAMINER SHANG, ANNAN Q	
			ART UNIT 2623	PAPER NUMBER
			MAIL DATE 09/25/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/862,826

Applicant(s)

TAKEUCHI, ISAO

Examiner

Annan Q. Shang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/24/07 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1 and 4-6 have been considered but are moot in view of the new ground(s) of rejection.

With respect to claims 1 and 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by **Igarashi et al (5,940,143)**, applicant amends claims and argues that, the prior art of record does not teach amended claim limitation, i.e., "...an interference signal having a carrier frequency of a highest peak level, the interference signal mixed in the frequency bandwidth of the same channel..."(see page 4+ of Applicant's Remarks)

In response, Examiner disagrees. Examiner notes applicant's arguments, however, Igarashi discloses a Limiter-180, which dynamically adjusts interference of a peak level or threshold and a PLL/Controller 130/220, which phase locks to the interference signal of the peak level and feeds the signal to a level adjuster IFAGC-100

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as illustrated by the feedback loops of figs.1-3 and in col.7, lines 1-52, col.8, lines 30-40, col.9, lines 48-65 and col.11, lines 35+). Besides suppressing interference between channels caused by broadcast having different levels such as high-definition TV signal and standard TV signals transmitted simultaneously, Igarashi further discloses suppressing interference in the same channel as a result of specific terrain or during a specific weather change and also interference caused by the peripheral elements within the receiver, when a desired channel is selected (col.3, line 64-67, col.6, line 22-27 and col.11, lines 35-52). Hence Applicant's amended claims do not overcome the prior art of records.

The amendment to all the independent claims necessitated the new ground(s) of rejection discussed below. **This Office Action is non-final.**

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Igarashi et al (5,940,143)

As to claim 1, note the Igarashi reference figures 1-3, disclose high-definition TV signal receiving apparatus and gain control circuit and further discloses an interference reducing circuit comprising:

Receiving means (NTSC Receiver, col.5, lines 5, lines 3-17 and lines 44-58) which includes a signal processing circuit for tuning and demodulating a reception signal of a frequency bandwidth of a channel with interference signal having a carrier frequency of a highest peak level, the interference signal mixed in the frequency bandwidth of the same channel (col.3, line 64-67, col.5, line 58-col.6, line 6, line 22-27 and col.11, lines 35-52);

Phase locking means (PLL/Controller 'PLL/C' 130/220) for attaining phase locking the interference signal of the highest peak level (col.5, lines 18-22 and col.6, lines 7-15), note Igarashi discloses a Limiter-180, which adjust the interference of a peak level or threshold (col.5, lines 23-35, col.6, lines 31-42, col.7, lines 1-52, col.8, lines 30-40, col.9, lines 48-65 and col.11, lines 35+)

Level adjusting means (IFAGC-100, col.7, line 53-col.8, line 6) for adjusting a level of a phase-locked signal that is output from the phase locking means to be equal to a level of the interference signal (col.8, lines 7-67 and col.10, line 60-col.11, line 52) and subtracted means (AGC Detector 200) for subtracting the level-adjusted phase-locked signal of the reception means (col.7, lines 31-63), note that besides suppressing interference between channels caused by broadcast having different levels such as high-definition TV signal and standard TV signals transmitted simultaneously, Igarashi further discloses suppressing interference in the same channel as a result of specific

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terrain of during a specific weather change and also interference cause by the peripheral elements within the receiver, when a desired channel is selected.

As to claim 4, Igarashi further discloses where the interference signal has an amplitude-modulated or frequency-modulated carrier and where a loop characteristic of the PLL means is set so as to follow the amplitude-modulated carrier or the frequency-modulated carrier (col.5, lines 36-65 and col.8, lines 6-40 and col.11, lines 35-52).

As to claim 5, the claimed "a TV broadcasting receiver, comprising..." is composed of the same structural elements that were discussed with respect to the rejection of can 1 above.

Claim 6 is met as previously discussed with respect to claim 4.

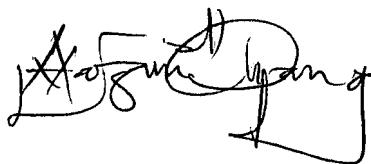
Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Annan Q. Shang** whose telephone number is **571-272-7355**. The examiner can normally be reached on **700am-400pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Christopher S. Kelley** can be reached on **571-272-7331**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the **Electronic Business Center (EBC) at 866-217-9197 (toll-free)**. If you would like assistance from a **USPTO Customer Service Representative or access** to the automated information system, **call 800-786-9199 (IN USA OR CANADA) or 571-272-1000**.

A handwritten signature in black ink, appearing to read 'Annan Q. Shang', with a stylized, cursive script.

Annan Q. Shang